## FOOT PRESSURE AND SHEAR DATA VISUALIZATION SYSTEM

## **ABSTRACT OF THE DISCLOSURE**

[0077] A foot pressure and shear visualization system employs a deformed mesh technique to visualize horizontal shear and color mapping to visualize vertical pressure on a skin surface, e.g. the plantar surface of a foot. Additional cues, such as scaled, directed arrows may be used to enhance the visualization. This system includes a set of sensor hardware interface modules to acquire foot visualization data sets, a data base manager that allows host applications to store and retrieve the data files in a data base, a graphical user interface that performs the display and control aspect, as well as maintains the data files, and a visualization and analysis engine that performs all data set rendering and analysis. The graphical user interface controls a main user interface window, while the visualization and analysis engine controls a rendering window for the combined shear and pressure visualization.